IN THE CLAIMS

Please amend the claims as follows:

1. (Original) A single crystal semiconductor manufacturing apparatus for manufacturing a single crystal semiconductor by heating a melt in a crucible by heating means, contacting an impurity-added seed crystal with the melt, and pulling up the seed crystal, wherein:

the melt is adjusted by the heating means and a magnetic field is applied to the melt so that, when the seed crystal is contacted with the melt, a temperature difference between the seed crystal and the melt becomes not larger than an allowable temperature difference not causing dislocation in the seed crystal.

2. (Original) A single crystal semiconductor manufacturing apparatus for manufacturing a single crystal semiconductor by heating a melt in a crucible by heating means, contacting an impurity-added seed crystal with the melt, and pulling up the seed crystal, wherein:

a plurality of adjusting means for independently adjusting an amount of heat applied to the crucible are disposed, and

the melt is adjusted by the plurality of adjusting means and a magnetic field is applied to the melt so that, when the seed crystal is contacted with the melt, a temperature difference between the seed crystal and the melt becomes not larger than an allowable temperature difference not causing dislocation in the seed crystal.

3. (Presently amended) The single crystal semiconductor manufacturing apparatus according to claim 1 ~~or 2~~, wherein the allowable temperature difference not causing dislocation in the seed crystal is determined according to an impurity concentration added to the seed crystal and a size of the seed crystal.

4. (Original) The single crystal semiconductor manufacturing apparatus according to claim 2, wherein among the plurality of adjusting means, at least the heating means at the bottom side of the crucible provides an invariable or substantially invariable heating amount when the seed crystal is contacted with the melt and an invariable or substantially invariable heating amount when the single crystal semiconductor is being pulled up.

5. (Original) A single crystal semiconductor manufacturing method for manufacturing a single crystal semiconductor by heating a melt in a crucible, contacting an impurity-added seed crystal with the melt, and pulling up the seed crystal, wherein:

the melt is heated and a magnetic field is applied to the melt so that, when the seed crystal is contacted with the melt, a temperature difference between the seed crystal and the melt becomes not larger than an allowable temperature difference not causing dislocation in the seed crystal.

6. (Original) The single crystal semiconductor manufacturing method according to claim 5, wherein the allowable temperature difference not causing dislocation in the seed crystal is determined according to an impurity concentration added to the seed crystal and a size of the seed crystal.

7. (New) A single crystal semiconductor manufacturing method for manufacturing a single crystal semiconductor by heating a melt in a crucible, contacting an impurity-added seed crystal with the melt, and pulling up the seed crystal, wherein:

the melt is heated so that a temperature difference between the seed crystal and the melt becomes not larger than an allowable temperature difference not causing dislocation in the seed crystal when the seed crystal is contacted with the melt, and

a magnetic field is applied to the melt before the seed crystal is contacted with the melt.

Respectfully submitted,
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